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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,535	05/02/2002	Erik Coelingh	201-0704	9568

28415 7590 08/07/2003

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FOA25 P333

EXAMINER

ZANELLI, MICHAEL J

ART UNIT PAPER NUMBER

3661

DATE MAILED: 08/07/2003

msj Response Due
 jns November 7, 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/063,535

Applicant(s)

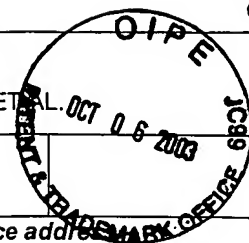
COELINGH ET AL.

Examiner

Michael J. Zanelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,6-9,13-15,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 1,4,5,10-12,16,19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This application has been examined. Claims 1-20 are pending.
2. The IDS filed 5/2/02 has been considered.
3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because the signatures did not reproduce (i.e., partially missing/faint). Also the right side of the document is cut-off.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
5. Claims 1-5 and 16-20 are objected to because of the following informalities:
 - A. As per claim 1, at line 19 delete "and".
 - B. As per claim 16, at line 26 delete "and".
 - C. All claims depending from an objected base claim are also objected to as containing the same deficiencies.
6. Claims 2, 3, 7, 8, 13, 14, 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - A. As per claim 2, "the first and at least one second control modules" lack antecedence.
 - B. As per claim 7, "*subsystem* coordinator controller" lacks antecedence.

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- C. As per claim 13, “the first and at least one second control modules” lack antecedence.
 - D. As per claim 17, “the first and at least one second control modules” lack antecedence.
 - E. As per claim 18, “the damping control *subsystem*”, “the roll control *subsystem*” and “the roll control *subsystem*” lack antecedence. Note claim 17 uses the term “module”.
 - F. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.
7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 6, 9 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Reimann et al. (6,226,581).
- A. As per claim 6, Reimann discloses a method of controlling a suspension (407) of a vehicle (Fig. 4) including providing a suspension coordinator subsystem (414) configured to modify the suspension of the vehicle and at least one accompanying coordinator controller (411) configured to modify other components of the vehicle that affect vehicle motion; outputting an output signal (S2) from at least one accompanying controller; calculating a demand signal (driver’s intentions); inputting the demand signal into the suspension coordinator (E3); modifying the suspension of the vehicle

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(417). As noted in col. 9, line 5 to col. 10, line 48, one accompanying coordinate controller may affect the demand signal sent to the suspension controller via the system coordinator (404).

B. As per claim 9, as above wherein an actuator control signal (A1) is output from the suspension controller.

C. As per claim 15, as above wherein a vehicle motion control system (404) is provided and the vehicle motion control system (404) modifies the demand signal provided to the suspension coordinator subsystem (414) and at least one accompanying coordinator controller (411).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reimann et al. in view of Ishii et al. (4,828,283).

A. As per claims 13 and 14, Reimann is applied as above. Reimann discloses a suspension controller for controlling roll and leveling of a vehicle (col. 12, lines 15-21). Reimann does not specifically discuss individual modules for each control function (i.e., damping, roll and leveling) as claimed. However, one of ordinary skill in the art would have found it obvious to use one or more known control structures to carry out at least the control functions described by Reimann (*supra*).

B. Ishii is an exemplary teaching in which damping forces, roll stiffness and height control (leveling) are carried out together in a vehicle suspension control system (see Abs.). One of ordinary skill in the art would have found it obvious to control these three parameters in the coordinated suspension control of Reimann because it would have provided greater stability control. Use of one or more individual modules for each function within the control structure of Reimann (Fig. 4:407) would have been dependent upon the hardware/software configuration of the the suspension controller (407).

12. Claims 1-5, 7, 8, 10-12, and 16-20 are distinguishable over the prior art. As per claims 1 and 16, the prior art of record does not show or reasonably suggest, in combination with the other claimed subject matter, determining first capabilities of a first actuator control subsystem and outputting first and second partial suspension behavior modification demand signals calculated according to the first capabilities of the first actuator control subsystem. As per claim 7, the prior art of record does not show or reasonably suggest, in combination with

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the other claimed subject matter, an output signal from at least one accompanying coordinator controller which carries information about a capability of the at least one accompanying coordinator controller for implementing vehicle behavior modification. As per claim 10, determining the capabilities of each at least one actuator control subsystem and outputting the capabilities of each at least one actuator control subsystem to a suspension coordinator subsystem. Dependent claims 2-5, 8, 11-12 and 17-20 are distinguishable for at least the same reasons noted above for their respective base claim.

13. Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 1-5 and 16-20 would be allowable if rewritten or amended to overcome the objection(s)/rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

15. Claims 7 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited patents represent the general state of the art.


17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (703) 305-9756. The examiner can normally be reached on Monday-Thursday 5:30 AM - 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

/mjz
August 2, 2003



MICHAEL J. ZANELLI
PRIMARY EXAMINER

Notice of References Cited	Application/Control No. 10/063,535	Applicant(s)/Patent Under Reexamination COELINGH ET AL.	
	Examiner Michael J. Zanelli	Art Unit 3661	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,226,581	05-2001	Reimann et al. ✓	701/48
	B	US-5,991,669	11-1999	Dominke et al. ✓	701/1
	C	US-5,655,082	08-1997	Umekita et al. ✓	709/213
	D	US-4,850,650	07-1989	Eckert et al. ✓	303/9.62
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. 201-0704	SERIAL NO. 10/063,535
	APPLICANT(S) Erik Coelingh et al.	
	FILING DATE	GROUP 3601

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPRO- PRIATE
mm	6 1 9 2 3 0 7	02/20/01	Okamoto et al.			
	6 1 6 1 0 7 1	12/12/00	Shuman et al.			
	6 1 5 4 6 8 8	11/28/00	Dominke et al.			
	6 0 9 8 0 0 7	08/01/00	Fritz			
	6 0 3 8 5 0 5	03/14/00	Probst et al.			
	5 9 9 1 6 7 5	11/23/99	Asamura			
	5 9 2 7 4 2 1	07/27/99	Fukada			
my	5 8 2 2 7 0 9	10/13/98	Fujita			

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLA- TION

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	

EXAMINER	my	DATE CONSIDERED	7/29/03
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

<p>FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(Use several sheets if necessary)</p>	<p>ATTY. DOCKET NO. 201-0704</p>	<p>SERIAL NO. 10/063,535</p>
	<p>APPLICANT(S) Erik Coelingh et al.</p>	
	<p>FILING DATE</p>	<p>GROUP 3661</p>

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPRO- PRIATE
mm	5 7 9 4 7 3 5	08/18/98	Sigl			
	5 5 1 3 1 0 8	04/30/96	Kishimoto et al.			
	5 4 8 5 8 9 2	01/23/96	Fujita			
	5 4 4 6 6 6 2	08/29/95	Kojima et al.			
	5 3 6 9 5 8 4	11/29/94	Kajiwara			
	5 3 5 1 7 7 6	10/04/94	Keller et al.			
mm	5 3 4 2 0 7 9	08/30/94	Burna			
mm	5 1 7 3 8 5 8	12/22/92	Wada et al.			

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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	APPLICANT(S) Erik Coelingh et al.	
	FILING DATE	GROUP 3661

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPRO- PRIATE
MZ	5 1 5 9 5 5 5	10/27/92	Wada			
	5 1 0 1 3 5 5	03/31/92	Wada et al.			
	5 0 7 0 4 6 0	12/3/91	Yasuno			
	5 0 4 8 6 3 3	09/17/91	Takehara et al.			
	5 0 4 1 9 7 8	08/20/91	Nakayama et al.			
	4 9 7 0 6 4 5	11/13/90	Adachi et al.			
	4 8 2 8 2 8 3	05/09/89	Ishii et al.			
M	4 8 2 7 4 1 6	05/02/89	Kawagoe et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLA- TION

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EXAMINER	MJ	DATE CONSIDERED	7/29/03
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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 201-0704	SERIAL NO. 10/063535
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		
(Use several sheets if necessary)		
APPLICANT(S) Erik Coelingh et al.		FILING DATE
GROUP	3601	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPRO- PRIATE
mm	4 4 3 9 8 2 4	03/27/84	Mayer			

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FOREIGN PATENT DOCUMENTS

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